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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,088	02/27/2004	Masayuki Tamai	NY-KIT-367-US	7537
24972 75	590 07/05/2006		EXAMINER	
FULBRIGHT & JAWORSKI, LLP			CHOL, JACOB Y	
666 FIFTH AV NEW YORK,	E NY 10103-3198		ART UNIT	PAPER NUMBER
,			2875	
			DATE MAILED: 07/05/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	WO
	10/789,088	TAMAI ET AL.	
Office Action Summary	Examiner	Art Unit	
	Jacob Y. Choi	2875	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above, the maximum statutory pe  - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply within the statutory minimum of thir riod will apply and will expire SIX (6) MOI atute, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communic BANDONED (35 U.S.C. § 133).	ation.
Status			
Responsive to communication(s) filed on 2     This action is FINAL. 2b) □ 3     Since this application is in condition for allocation accordance with the practice und	This action is non-final. wance except for formal mat		s is
Disposition of Claims			
4) ⊠ Claim(s) 7,10-12 and 14 is/are pending in to 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 7,10-12 and 14 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction are	drawn from consideration.		
Application Papers			
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on 14 June 2004 is/are Applicant may not request that any objection to Replacement drawing sheet(s) including the con 11) ☐ The oath or declaration is objected to by the	: a)⊠ accepted or b)⊡ obje the drawing(s) be held in abeya rrection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.12	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the priority docum application from the International Bu * See the attached detailed Office action for a	nents have been received. Hents have been received in A priority documents have been reau (PCT Rule 17.2(a)).	Application No n received in this National Stage	·
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SE Paper No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152)	

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#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 27 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the feet set forth in 37 CFR 1.179e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 25, 2006 has been entered.

# Specification

2. The amendment filed April 25, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "... said reflector unit being formed independently of said printed circuit board ... etc".

Applicant is required to cancel the new matter in the reply to this Office Action.

## Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling "... said reflector unit being formed independently of said printed circuit board ... etc." critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The originally field specification failed to provide any clear support behind the sited limitation(s).

## Claim Objections

5. Claims 11-12 are objected to because of the following informalities: dependent claim(s) does not refer to a preceding claim which, in turn, refers to another preceding claim. Claims depend on canceled claim No. 8. See MPEP § 608.01(n). Appropriate correction is required.

#### Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

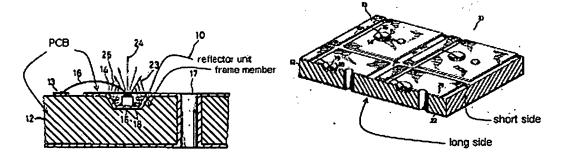
A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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7. Claims **7 and 10-11** are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (USPN 5,119,174).

Regarding claim 7, Chen discloses a printed circuit board (PCB; e.g., 21, 22, 12 & 13), a wiring land (e.g., Figure 1) formed on the printed circuit board (e.g., 21, 22, 12 & 13), a light-emitting diode (e.g., 15) element surface-mounted on the printed circuit board (PCB), a bonding wire (e.g., 16) connecting between the LED element and the wiring land (e.g., Figure 2-3), and a reflector unit (e.g., 14) mounted on the printed circuit board (e.g., PCB) surround the LED elements, the reflector unit comprising, a rigid frame member (e.g., 12; "PCB base"), and a reflector (e.g., 14) connected with an inner side of the frame member (12) and supported to the frame member (e.g., 12), and reflector (e.g., 14) being arranged between the LED (e.g., 15) element and the wiring land (e.g., Figure 1) for directing a beam emitted (e.g., 23-25) from the LED element toward an object to be illuminated (e.g., "display area") wherein the frame member comprises a rectangular frame (e.g., Figure 1) member having long-side portions and short-side portions, wherein the reflector is arranged along the long-side portions and rigidly formed in unison with the frame member, wherein the LED elements are arranged to form an LED array, and wherein the reflector has a reflecting surface extending along the LED array.



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**Note**: Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

The method of forming the device is not germane to the issue of patentability of the device itself (e.g., "... said reflector unit being formed independently of said printed circuit board ... etc."). Therefore, this limitation has not been given patentable weight.

Regarding claim 10, Chen discloses the wiring land is laid at an area between the reflector and the frame member (e.g., Figures 2-3).

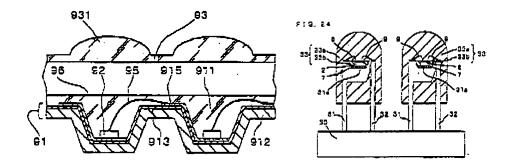
Regarding claim 11, Chen discloses the bonding wire (e.g., 16) is laid to leap over the reflector (e.g., Figures 2-3).

8. Claims **7 and 10-12** are rejected under 35 U.S.C. 102(e) as being anticipated by Sugimoto et al. (USPN 6,874,910).

Regarding claim 7, Sugimoto et al. discloses a printed circuit board (e.g., 91), a wiring land (e.g., Figure 25) formed on the printed circuit board (e.g., 91), a light-emitting diode (e.g., 92) element surface-mounted on the printed circuit board (e.g., 91), a bonding wire (e.g., 95) connecting between the LED element and the wiring land (Figure 25; e.g., 915), and a reflector unit (e.g., 913; column 3, lines 20-40; "the insulating layer which may interrupt the effect of heat radiation (light) ... the die bonding paste is commonly a silver particles dispersed resign material ... etc") mounted on the printed circuit board (e.g., 91) surround the LED elements, the reflector unit comprising, a rigid frame member (e.g., 912; aluminum) and a reflector (e.g., 913) connected with an inner side of the frame member (e.g., 912) and supported to the frame member (e.g., 912), and reflector (e.g., 92) element and

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the wiring land (e.g., Figure 25) for directing a beam emitted (e.g., 931) from the LED element toward an object to be illuminated (e.g., "display area") wherein the frame member comprises a rectangular frame member having long-side portions and short-side portions (e.g., Figures 1b, 12b, 13b), wherein the reflector is arranged along the long-side portions and rigidly formed in unison with the frame member, wherein the LED elements are arranged to form an LED array, and wherein the reflector has a reflecting surface extending along the LED array.



Regarding claim 10, Sugimoto discloses the wire land is laid at an area between the reflector and the frame member.

Regarding claim 11, Sugimoto discloses the bonding wire (95) is laid to leap over the reflector (e.g., Figures 24 & 25).

Regarding claim 12, Sugimoto discloses the reflector comprises a relay land (915) on a top face thereof and the bonding wire (95) is laid via the relay land.

## Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim **14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (USPN 5,119,174).

Regarding claim 14, Chen discloses the light source unit suggesting a light emitting diode display with PCB base improving the stability of the wavelength (color) of the LED and decrease the depredating the light output of the LED to prolong the life of the display.

However, Chen failed to mention the arrays of LED(s) are utilized for a color film scanner.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

11. Claim **14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto et al. (USPN 6,874,910).

Regarding claim 14, Sugimoto discloses the light source unit includes a plurality of the LED arrays for red, blue and green colors.

However, Sugimoto failed to mention the arrays of LED(s) are utilized for a color film scanner.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

## Response to Amendment

12. Examiner acknowledges that the applicant has canceled claims 8-9 and 13 and amended claims 7, 1-12 and 14. Currently, claims 7, 10-12 and 14 are pending in the application.

## Response to Arguments

13. Applicant's arguments filed April 25, 2006 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "... said reflector unit being formed independently of said printed circuit board ... etc") this limitation has not been given patentable weight because the method of forming the device is not germane to the issue of patentability of the device itself

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "... This advantageously improves the rigidity of the frame member and enables the reflector unit to be arranged relative to the LED element with accuracy and without a

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change over time ... etc.") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

#### Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

Supervisory Patent Examiner Technology Center 2800